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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,186	05/17/2005	Kai Vikman	LAIN-093	2380

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KUBOVCIK & KUBOVCIK
SUITE 710
900 17TH STREET NW
WASHINGTON, DC 20006

EXAMINER

FRANCIS, FAYE

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/535,186

Applicant(s)

VIKMAN, KAI

Examiner

Faye Francis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/17/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to a method of using at least two refining stages for producing fiber mass, classified in class 241, subclass 21.
 - II. Claims 8-13, drawn to an apparatus for producing fiber mass, classified in class 241, subclass 152.1.

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process. For example the apparatus recited in claims 1-7 can be used without the step of feeding the flow of mixture of fibers that are refined and steam forward at least in the first refining stage by rotary energy of a rotor of the refiner so that no essential back-flow of the steam occurs as recited in claim 1.

2. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Mr. Keiko Kubovicik on Friday June 16, 2006 a provisional election was made with traverse to prosecute the invention of I,

claims 1-7. Affirmation of this election must be made by applicant in replying to this Office action. Claim 8-13 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

2. The disclosure is objected to because of the following informalities: There should be no reference to any particular claims in the specification [note page 4 of the specification].

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the

field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign

document and are replete with grammatical and idiomatic errors. For example **only**, claim 1 recites the limitation "the following refiner" in line 13 and claim 5 recites the limitation "the previous stage and the following stage" in line 3. There is insufficient antecedent basis for these limitations in the claims. Also, claim 3 is indefinite since all that the applicant considers to be encompassed by the phrase "the comparable processes" cannot be determined.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cederquist et al. [4,136,831], hereinafter Cederquist in view of WO 96/18769, hereinafter WO'769.

Cederquist discloses in Fig 1, a method for using at least two refining stages formed of an independent refiners for producing fibers from wood chips, comprising at least steps of feeding at least wood chips and water into a first refining stage [defibrator 6], using the first refining stage for defibrating the chips to fibers, removing a flow of steam and fibers from the first refining stage, feeding the flow of refined fibers and steam into a second refining stage [defibrator 8], and removing the flow of fibers and steam from the second refiner [col 2 line 63 to col 3 line 12]. Additionally, Cederquist discloses feeding the flow of mixture of fibers that are refined and steam forward at least

in the first refining stage by rotary energy of a rotor of the refiner so that no essential back-flow of the steam transferring the fiber and steam mixture exiting the first refiner totally into the second refiner without separating steam from the flow [col 3 lines 12-34], and feeding the mixture through a flow path having a cross section that is constant [pipes shown in Fig 1 have a constant cross sections] between at least the exit of the first refining stage and infeed of the second refining stage and separating steam from the fibers after second refiner and feeding that steam back to the first refiner [Fig 1].

Should Cederquist be later deemed not to meet claims 1-7 because Cederquist does not disclose the first refining stage comprises a rotor as disclosed by the applicant, WO'769 is cited to show desirability, in the relevant art to utilize rotors [rotor discs 4 and 11] for preparing pulp. It would have been obvious in view of WO'769, to replace the refiner in the device of Cederquist with the rotor as taught by WO'769, in order to better refine the wood chips, especially since both will perform the same function of refining wood chips, if one is replaced with the other.

Any remaining limitations not disclosed in the reference would then have been obvious design choice, as they solve no stated problem and of no patentable merit.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'769 in view of Cederquist.

WO'769 discloses in Fig 1, a method for using at least two refining stages formed of an independent refiners for producing fibers from wood chips, comprising at least steps of feeding at least wood chips and water into a first refining stage [dispenser 1], using the first refining stage for defibrating the chips to fibers, removing a flow of steam

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and fibers from the first refining stage, feeding the flow of refined fibers and steam into a second refining stage [dispenser 8], and removing the flow of fibers and steam from the second refiner [see page 4 first and last paragraphs]. Additionally, WO'769 discloses feeding the flow of mixture of fibers that are refined and steam forward at least in the first refining stage by rotary energy of a rotor of the refiner so that no essential back-flow of the steam transferring the fiber and steam mixture exiting the first refiner totally into the second refiner without separating steam from the flow [see page 4 first and last paragraphs].

WO'769 does not disclose separating steam from the fibers after second refiner and feeding that steam back to the first refiner and may not disclose feeding the mixture through a flow path having a cross section that is constant between at least the exit of the first refining stage and infeed of the second refining stage.

Cederquist is cited to show desirability, in the relevant art to separating steam from the fibers after second refiner and feeding that steam back to the first refiner [col 3 lines 12-34] in order to conserve energy. It would have been obvious in view of Cederquist to modify the device of WO'769 so that the separated steam can be feed back to the first refiner in order to make the device more efficient by reducing the cost. Also, with respect to feeding the mixture through a flow path having a cross section that is constant, Cederquist teaches that it is conventional to utilize pipes having a constant cross sections [pipes shown in Fig 1 have a constant cross sections] in order to direct the flow of the material from one point to other Therefore, it would have been obvious in

view of Cederquist, to provide the device WO'769 with flow path/pipe having a cross section that is constant in order better direct the flow of the material.

Any remaining limitations not disclosed in the reference would then have been obvious design choice, as they solve no stated problem and of no patentable merit.


Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Francis whose telephone number is 571-272-4423. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FF


Faye Francis
Primary Examiner
Art Unit 3725